



# FACTS ON MALE INFERTILITY IN ANCIENT AYURVEDA: HISTORICAL REVIEW

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## ABSTRACT

The tread of sexuality is woven densely into the fabric of human existence. The rich heritage of Indian culture considered 'Kama' as one among the *Purusharthas*, the objectives of life. Ayurveda mentions diet (*Ahara*), sleep (*Nidra*) and *Brahmacharya* as the Tripods of life. Sex is a basic instinct, but sexual behaviour is a learned ability. Dharma, Artha, Kama and Moksha are four pillar of life mentioned in *Ayurveda*. The achievement of each of these is the basic need of every individual. The concept of Kama reveals that the recreational aspects like pleasure are equally important to its procreation aspects. **Aim and Objective:** To reviled Ayurveda ancient knowledge by analyse our ancient text and propagate it to today's era. **Discussion:** Male reproductive failure leading to infertility is a significant problem affecting more than 80 million couples worldwide also peoples are not much aware about sexual knowledge which can provide by branch of Ayurveda like *Vajikarana*. By ancient text like *Vedas* and *Upanishadas*, people can aware to huge knowledge of science of life and propagate it.

**KEY WORDS:** Ayurveda, history, infertility, Reproduction, sperm count, Shukra.

## Back Ground:

These science of life have been described all type preventive, primitive and curative aspect of curtailments. It is not only science which cures the disease also it removes the root of disease. It cures ailments of body as well as manages the disorder of mental also. To elucidate these ancient knowledge let we have to go thoroughly its root (Vedas). A study by the All India Institute of Medical Sciences (AIIMS)<sup>1</sup> concluded that while the sperm count of a normal Indian adult male used to be 60 million per ml around three decades ago, it now stands at around 15 million per ml.<sup>2</sup> It is need of time to explore our *Ayurveda* knowledge from its root. *Vajikarana* is one of the branches of *Ayurveda* that deals with the preservation and amplification of sexual potency of healthy man and conception of healthy progeny as well as management of defective semen, disturbed sexual potency and spermatogenesis along with treatment of seminal related disorders in man.<sup>3</sup> Now a day's infertility is become social stigma where it affect mentally, financially and physically both male and female. Because of sedentary, hectic, stressful life style People are suffering from primary or secondary infertility and couples affording very expensive techniques for that but without success. That's why infertile couple looking towards Ayurveda. Hence let first know what is the root description in Vedas regarding *Garbhotpatti* (reproduction).

## AIMS AND OBJECTIVES:

To elucidate historical review of male infertility from root of ancient Ayurvedic science (Veda) and modern science point of view for their better prospective.

## MATERIAL AND METHODS:

To fulfil the aims and objectives relevant Ayurveda and Modern literature, available information on internet etc. were searched. The results on search are described hereafter

## DISCUSSION:

### Vedas:

In all four *Vedas*, namely *Rigveda*, *Yajurveda*, *Samaveda* and *Atharvaveda*, various aspects of human life have been described and *Ayurveda* has been recognized as *Upveda* of *Atharvaveda*.

The word *Retas* has been widely used in *Vedic Samhita* in relation to reproduction.<sup>4,5,6</sup> *Retas* has been quoted as *Sara* of all *Dhatus*.<sup>7</sup> Its derivation has been mentioned as "*Ri Gatinesanayona-srutibhyam Tat Cha*".<sup>8</sup>, which means *Retas* is substance, which flows, which has stream or current (similar to water).<sup>9</sup> The word *Shukra* is used to indicate male factor for *Santanotpatti*.<sup>10</sup> Qualities like *Dipta* (bright), *Nirmala* (pure), *Shrahub* (spotless), *Shveta* and *Shukla* (white) are denoted for *Shukra*.<sup>11</sup>

*Papakarma* has been considered as a *Nidana* of *Retakshaya*.<sup>12</sup> Three types of *Virya* has been mentioned in *Atharvaveda*.<sup>13</sup> In *Atharvaveda*, description about *Guhya Shukra* and *Sthula Shukra* has also been mentioned.<sup>14</sup> Definition of *Vajikarana Tantra* as the drug which is useful in the treatment of impotency and sterility<sup>15</sup> can also be traced in *Atharvaveda*.

### Brahmanas and Upanishada:

The process of *Garbha Nirmana* has been mentioned in *Taittiriya Aranyaka*.<sup>16</sup>

*Retosarjana* and *Mutra Visarjana* have been mentioned as dual function of Penis. *Shukra Visarjana* release *Amrita* or *Sanjivaka Rasa*.

### Nirukta and Puranas:

Factor which decides the sex and twins has been mentioned in *Nirukta*.<sup>17</sup> In *Markandeya*<sup>18</sup> *Purana*, *Vidyapaharana* or stealing of other knowledge has been considered as one of the cause of sterility. Various recipes which have spermatopoetic activity have been mentioned in *Garuda Purana*.<sup>19</sup>

### Kamasutra:

The absence of love between two partner causes *Shukradushti* either *Dravyataha* or *Gunataha*.<sup>20</sup> According to *Yashodhara*, *Virya Alpam* means either reduced activity or scarcity of '*Shukra Dhātu*'.<sup>21</sup> *Yashodhara Bhatta* in his commentary on *Kamasutra* opines that reproductivity is impossible in the absence of *Shukra*.<sup>22</sup>

### Charaka Samhita:

*Charaka* has mentioned four chapters for *Vajikarana* and has mentioned *Shukra Dhātu Kshaya Lakshana* and eight types of *Retodoshas* in *Sutrasthana*<sup>23</sup> and then again mentioned them in *Chikitsa Sthana* under the title of *Shukradushti*<sup>24</sup> and its *Chikitsa* in *Sharira Sthana*<sup>25</sup> and *Nidanas* of *Shukra Kshaya* in *Vajikarana Adhyaya*.<sup>26</sup>

### Sushruta Samhita:

*Sushruta* while defining *Vajikarana* has mentioned the word *Ksheena Shukra* and has considered *Ksheena Shukra* as one of the condition of *Shukra Dushti*. According to *Sushruta*, *Doshas* responsible for *Sukradushti* are *Vyana* and *Apana Vayu* and *Upachaya* is the main treatment for *Ksheena Shukra*.<sup>27</sup>

### Ashtanga Samgraha:

"*Abija*" is the word used as a factor responsible for male infertility.<sup>28</sup> Eight types of *Retodoshas* are mentioned. *Ksheena Shukra Lakshanas* and its *Chikitsa* have been mentioned in *Sutrasthana*.<sup>29</sup> According to this text, *Kshina Retas* occurs due to vitiated *Vata* and *Pitta Doshas* and complete pacification of them is essential for its treatment.<sup>30</sup>

### Ashtanga Hridaya:

*Ksheena Retas* occurs due to *Maruta- Pitta* and *Ksheena Shukra Lakshanas* have been mentioned in *Sutrasthana*.<sup>31</sup> *Shukrakari Kriyas* have been advised for *Ksheena Shukra*.<sup>32</sup> Various *Vajikara Yogas* have been mentioned in *Uttarasthana*.<sup>33</sup>

### Kashyapa Samhita:

*Kashyapa* has mentioned eight types of *Shukra Doshas*<sup>34</sup> and its management in *Jatisutra Sharira Adhyaya*.<sup>35</sup> The characters of different types of *Virishna*, *Sepha* have also been indicated.<sup>36</sup> *Shukra Janana Karma* of *Lashuna* has been mentioned in *Lasuna Kalpa Adhyaya*.<sup>37</sup>

### Bhela Samhita:

Seven types of *Shukra Doshas* have been mentioned in *Bhela Samhita*. One *Anjali Pramana* of *Shukra* has been said in *Bhela samhita*<sup>42</sup> and excessive indulgence in *Maitihuna* leads to *Kshina Shukra*.<sup>38</sup>

**Harita Samhita:**<sup>39</sup>

In *Harita Samhita* specific *Pathyapathya* has been mentioned to avoid *Shukra Kshaya*. Three types of infertility have also been described in the text i.e *Manasa*, *Retas Kshyata* and *Sahaja*.

**Madhava Nidana:**

In *Parishista Adhyaya*, *Madhavakara* has described eight types of *Shukra Dosha* and *Shuddha Shukra Lakshanas*.<sup>40</sup>

**Chikitsa Kalika:**

Various *Vajikarana Yogas* have been given in *Vajikarana Adhyaya* by *Tisatacharya*.<sup>41</sup> Author has emphasized on *Shodhana* before administering of *Vajikara Yogas*.

**Chakradatta:**

*Virishya* drugs have been classified into three groups: *Shukra Sritikara*, *Shukra Vriddhikara*, and *Shukrasriti Vriddhikara*, and many *Vajikarana* recipes have been mentioned in this text.<sup>42</sup>

**Sharangadhara Samhita:**

*Sharangadhara* has described definition along with the appropriate examples of *Vajikara*, *Shukrala*, *Shukra Janaka*, *Shukra Pravartaka*, *Shukra Rechana*, *Shukra Stambhana* and *Shukra Shodhana* drugs<sup>43</sup> and has mentioned that *Ksheena Shukra* occurs due to *Vata Dosha*.<sup>44</sup>

**Bhavaprakasha:**

In *Bhavaprakasha*, *Vajikarana Adhyaya* has been mentioned separately in *Uttarakhand*.<sup>45</sup> Seven types of *Klaibya* have been described in the *Bhavaprakasha* along with their management. *Shukra Kshaya Lakshana* and *Shukrala Kshinasya Akanksha* have been indicated along with proper examples of *Vajikrana*, *Shukrala*, *Virya Janaka* and *Virya Pravartaka* drugs.<sup>46</sup>

**Yogaratanakara:**

Importance of *Shukra* has been indicated in this book. Various *Vajikarana Yogas* and dietary articles have been described in the management of *Ksheena Shukra*.<sup>47</sup>

**Bhaishajya Ratnavali:**

In *Bhaishajya Ratnavali*, reference related to *Shukrameha*, *Vajikarana*, *Klaibya* etc. have been mentioned in various *Adhikaras*.<sup>48</sup>

**History of Sperm in Modern Era:**<sup>49</sup>

Human sperm was described by a student of Antonij van Leeuwenhoek in 1677. Prussian-Estonian embryologist Dr. Karl Ernst von Baer described the ovum in 1827. The fact that human conception occurs when the sperm enters the ovum was discovered by physician Martin Berry in 1843. In 1920s, scientists discovered that women are fertile about halfway through their menstrual cycle. They therefore concluded that women can avoid getting pregnant by avoiding sex during that period. This was known as "rhythm method." In 1928, The first pregnancy test was developed by German gynecologists Selmar Aschheim and Bernhard Zondek. The test involved injecting a woman's urine into a female mouse. If the woman is pregnant, the mouse's ovaries become enlarged and the ovarian follicles mature. This changed the way the world looked at human reproduction. In 1934, the female hormone progesterone, responsible for the cyclical changes in the uterus which is also needed to sustain pregnancy, was isolated by German Adolf Butenandt in 1940s. The clinical perspective on systematic investigation of male infertility with an appropriate focus on semen analysis was first outlined in Robert Hotchkiss's 1944 book "Fertility in Men". The systematization of laboratory semen analysis largely stems from the work of Dr John MacLeod, a Scot working in New York, who introduced the concept of "seminal stress pattern": decreased sperm count, low motility, and abnormal sperm morphology and staked out the ground by publishing a series of landmark papers in semen analysis over 4 decades from the early 1940.

**CONCLUSION:**

Since Vedic period, to have healthy children has been praised and desired. Love, strength, happiness, professional excellence, wide spread influence, fame, pleasure are reliant upon children. Nature has gifted living being with the unique quality to procreate; these are the key of existence and survival of their own generation. Modern medicines expensive treatment modalities have common men cannot afford for it. Further results are not very encouraging. Hence, there is a search for alternative treatment modalities in other system of medicine, which is safe and cost effective. That's why people have to know Ayurveda since it root.

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